

ABSTRACT

A heat exchanger is provided in which high heat transfer efficiency has been attained by optimizing the slit array and setting an optimum range for the width of a slit and the spacing between slits. Slits 51 and 52 formed in front of the heat transfer coil

5 4 and slits 55 and 56 formed behind said heat transfer coil are arranged so as to provide a mutually different length among adjoining partitioned slits in the vertical direction, as well as a mutually different length between directly opposite partitioned slits in the horizontal direction. As a result, the position at which the slit is partitioned is staggered.

The two slits 53 and 54 formed side by side between heat transfer coil 4 and heat transfer
10 coil 4 are of the same length. For a 7 mm diameter heat transfer coil, the slit width relative to the diameter of the heat transfer coil ranges from $1.2/7$ (approximately 0.17) to $2.0/7$ (approximately 0.29), and the slit spacing relative to the diameter of the heat transfer coil ranges from $1.3/7$ (approximately 0.18) to $3.5/7$ (approximately 0.5).